

# Data Sheet | Item Number: 231-338/001-000

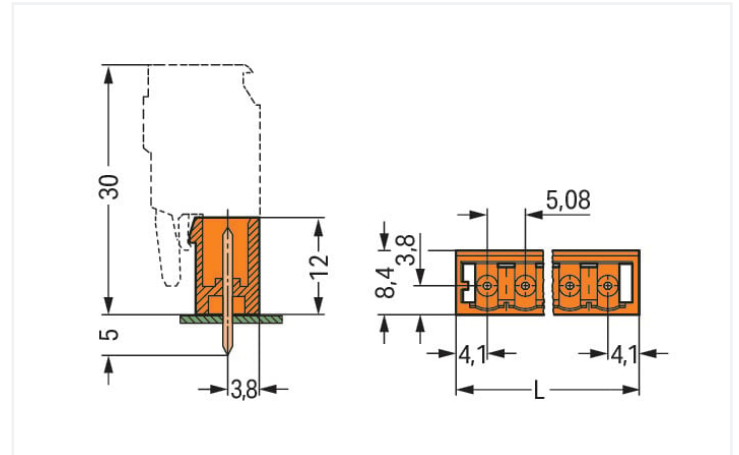
THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5.08 mm; 8-pole; orange

<https://www.wago.com/231-338/001-000>



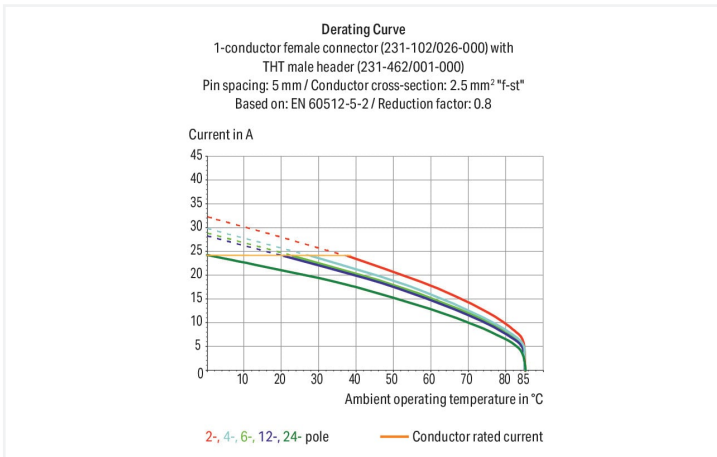
Color: ■ orange

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$



- Horizontal or vertical PCB mounting via straight or angled solder pins
- Pin cross-section: 1 x 1 mm
- With coding fingers

## Notes

Safety information

The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Variants:

Other pole numbers

3.8 mm pin projection for male headers with straight solder pins

Gold-plated or partially gold-plated contact surfaces

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

| Rated current        | IEC/EN 60664-1 |       |       |
|----------------------|----------------|-------|-------|
| Overvoltage category | III            | III   | II    |
| Pollution degree     | 3              | 2     | 2     |
| Nominal voltage      | 320 V          | 320 V | 630 V |
| Rated surge voltage  | 4 kV           | 4 kV  | 4 kV  |
| Rated current        | 12 A           | 12 A  | 12 A  |

| Rated current | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 10 A    | - | 10 A  |

| Approvals per | UL 1977 |
|---------------|---------|
| Rated voltage | 600 V   |
| Rated current | 10 A    |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 10 A  | - | 10 A  |

### Connection data

|                            |   |
|----------------------------|---|
| Total number of potentials | 8 |
| Number of connection types | 1 |
| Number of levels           | 1 |

| Connection 1 |   |
|--------------|---|
| Pole number  | 8 |

### Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 5.08 mm / 0.2 inches     |
| Width                                | 43.76 mm / 1.723 inches  |
| Height                               | 17 mm / 0.669 inches     |
| Height from the surface              | 12 mm / 0.472 inches     |
| Depth                                | 8.4 mm / 0.331 inches    |
| Solder pin length                    | 5 mm                     |
| Solder pin dimensions                | 1 x 1 mm                 |
| Drilled hole diameter with tolerance | 1.4 <sup>(+0.1)</sup> mm |

### Mechanical data

|                          |     |
|--------------------------|-----|
| Variable coding          | Yes |
| Anti-rotation protection | Yes |

### Plug-in connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type)        | for PCB             |
| Mismating protection               | No                  |
| Mating direction to the PCB        | 90 °                |

### PCB contact

|                                     |  |
|-------------------------------------|--|
| PCB contact                         | THT                                      |
| Solder pin arrangement              | over the entire male connector (in-line) |
| Number of solder pins per potential | 1  |

### Material data

|                             |  |
|-----------------------------|--|
| Note (material data)        | <a href="#">Information on material specifications can be found here</a> |
| Color                       | orange   |
| Material group              | I  |
| Insulation material         | Polyamide (PA66)   |
| Flammability class per UL94 | V0   |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact plating             | Tin  |
| Fire load                   | 0.047 MJ   |
| Weight                      | 2.6 g  |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °C |
| Processing temperature  | -35 ... +60 °C  |

### Commercial data

|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| eCl@ss 10.0           | 27-44-04-02            |
| eCl@ss 9.0            | 27-44-04-02            |
| ETIM 8.0              | EC002637               |
| ETIM 7.0              | EC002637               |
| PU (SPU)              | 100 pcs                |
| Packaging type        | Box                    |
| Country of origin     | PL                     |
| GTIN                  | 4044918865456          |
| Customs tariff number | 85366990990            |

### Environmental Product Compliance

|                        |                         |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

### Approvals / Certificates

#### General approvals



| Approval                              | Standard  | Certificate Name |
|---------------------------------------|-----------|------------------|
| CB<br>DEKRA Certification B.V.        | IEC 61984 | NL-39756/A1      |
| CSA<br>DEKRA Certification B.V.       | C22.2     | 1466354          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-121453        |
| UL<br>UL International Germany GmbH   | UL 1977   | E45171           |
| UR<br>Underwriters Laboratories Inc.  | UL 1059   | E45172           |

#### Declarations of conformity and manufacturer's declarations



| Approval                      | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway<br>WAGO GmbH & Co. KG | -        | Railway Ready    |

### Approvals for marine applications



| Approval                                | Standard | Certificate Name |
|---|----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping | -        | 19-HG1869876-PDA |

### Downloads

#### Environmental Product Compliance

|                                  |   |
|----------------------------------|---|
| Compliance Search                |   |
| Environmental Product Compliance | ↓ |
| 231-338/001-000                  |   |

## Documentation

|                        |            |                   |   |
|------------------------|------------|-------------------|---|
| Additional Information |            |                   |   |
| Technical Section      | 03.04.2019 | pdf<br>1949.09 KB | ↓ |

## CAD/CAE-Data

|                 |   |
|-----------------|---|
| CAD data        |   |
| 2D/3D Models    | ↓ |
| 231-338/001-000 |   |

|                   |   |
|-------------------|---|
| CAE data          |   |
| EPLAN Data Portal | ↓ |
| 231-338/001-000   |   |
| ZUKEN Portal      | ↓ |
| 231-338/001-000   |   |

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket

|  |   |  |  |
|--|---|--|--|
|  |   |  |  |
| <p><b>Item No.: 232-308/026-000</b><br/>1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; 2,50 mm<sup>2</sup>; orange</p>                                | <p><b>Item No.: 232-408/026-000</b><br/>1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; 2,50 mm<sup>2</sup>; orange</p>                                       | <p><b>Item No.: 231-308/026-000</b><br/>1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; 2,50 mm<sup>2</sup>; orange</p>  | <p><b>Item No.: 231-308/027-000</b><br/>1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; clamping collar; 2,50 mm<sup>2</sup>; orange</p>                 |
|  |   |  |  |
| <p><b>Item No.: 231-308/031-000</b><br/>1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; clamping collar; 2,50 mm<sup>2</sup>; orange</p>                       | <p><b>Item No.: 231-308/037-000</b><br/>1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; Lateral locking levers; 2,50 mm<sup>2</sup>; orange</p>                       | <p><b>Item No.: 231-308/102-000</b><br/>1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; with integrated end plate; 2,50 mm<sup>2</sup>; orange</p>                       | <p><b>Item No.: 2231-308/026-000</b><br/>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; 2,50 mm<sup>2</sup>; orange</p>            |
|  |   |  |  |
| <p><b>Item No.: 2231-308/031-000</b><br/>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; clamping collar; 2,50 mm<sup>2</sup>; orange</p> | <p><b>Item No.: 2231-308/037-000</b><br/>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; Lateral locking levers; 2,50 mm<sup>2</sup>; orange</p> | <p><b>Item No.: 2231-308/102-000</b><br/>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; with integrated end plate; 2,50 mm<sup>2</sup>; orange</p> | <p><b>Item No.: 231-2308/037-000</b><br/>2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; Lateral locking levers; 2,50 mm<sup>2</sup>; orange</p> |
|  |   |  |  |
| <p><b>Item No.: 231-2308/026-000</b><br/>2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; with integrated end plate; 2,50 mm<sup>2</sup>; orange</p>    |   |  |  |

## 1.2 Optional Accessories

### 1.2.1 Coding

### 1.2.1.1 Coding



**Item No.: 231-129**

Coding key; snap-on type; light gray

### 1.2.1.2 Intermediate plate

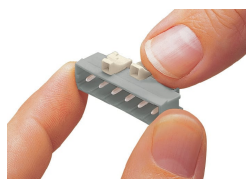


**Item No.: 231-500**

Spacer; for formation of groups; light gray

## Installation Notes

### Coding



Coding a male header – fitting coding key (s).